

this application, then such extensions of time are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required therefor (including fees for net addition of claims) are hereby authorized to be charged to our Deposit Account No. 19-0036.

***Amendments***

***In the Claims:***

Please add the following new claims:

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C' 33. (New) The method of claim 14, where said vector is delivered directly into said neoplastic cells.

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34. (New) The method of claim 33, wherein said vector is delivered directly into said neoplastic cells by inoculation.

35. (New) The method of claim 32, where said vector is delivered directly into said neoplastic cells.

36. (New) The method of claim 35, wherein said vector is delivered directly into said neoplastic cells by inoculation.

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Please amend the claims as follows:

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Please substitute the following claim 14 for currently pending claim 14:

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14. (Once amended) A method of enhancing the cytotoxic sensitivity of neoplastic cells to an antifolate drug, said method comprising:

C2 (a) delivering into said neoplastic cells a vector, said vector comprising a DNA sequence encoding folylpolyglutamyl synthetase (FPGS), operably linked to a promoter, wherein said FPGS is expressed in said neoplastic cells at a level higher than the endogenous FPGS level of said neoplastic cells;

(b) treating the neoplastic cells in step (a) with an antifolate drug that is polyglutamated by said FPGS; and

(c) enhancing the cytotoxic sensitivity of said neoplastic cells to said antifolate drug.

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Please substitute the following claim 20 for currently pending claim 20:

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C3 20. (Once amended) The method of claim 16, wherein said antifolate drug is methotrexate.

Please substitute the following claim 21 for currently pending claim 21:

21. (Once amended) The method of claim 16, wherein said antifolate drug is edatrexate.

[Please substitute the following claim 22 for currently pending claim 22.]

22. (Once amended) The method of claim 14, wherein said vector is a viral vector.

[Please substitute the following claim 23 for currently pending claim 23.]

23. (Once amended) The method of claim 20, wherein said vector is a viral vector.

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cancel  
[Please substitute the following claim 24 for currently pending claim 24.]

24. (Once amended) The method of claim 21, wherein said vector is a viral vector.

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Please substitute the following claim 27 for currently pending claim 27:


C4  
27. (Once amended) The method of claim 14, wherein said vector is non-viral.

[Please substitute the following claim 28 for currently pending claim 28.]

28. (Once amended) The method of claim 14, wherein said vector is a prokaryotic vector, a cationic liposome, a fusogenic liposome, a DNA-adenovirus conjugate, a DNA-protein complex, a non-viral T7 autogene vector, a starburst polyamidoamine dendrimer, a cationic peptide, or a mammalian artificial chromosome.

[Please substitute the following claim 29 for currently pending claim 29.]

29. (Once amended) The method of claim 27, wherein said vector is a prokaryotic vector.

Please substitute the following claim 30 for currently pending claim 30: 

*cytotoxic*

30. (Once amended) The method of claim 14, wherein said vector is delivered into said neoplastic cells by direct injection of nucleic acid, particle-mediated gene transfer, or receptor-mediated gene transfer.

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Please substitute the following claim 32 for currently pending claim 32:

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32. (Once amended) A method of enhancing the cytotoxic sensitivity of neoplastic cells to methotrexate or edatrexate, said method comprising:

*cytotoxic*

(a) delivering into said neoplastic cells a vector, said vector comprising a DNA sequence encoding folylpolyglutamyl synthetase (FPGS), operably linked to a promoter, wherein said FPGS is expressed in said neoplastic cells at a level higher than the endogenous FPGS level of said neoplastic cells;

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(b) treating the neoplastic cells of step (a) with methotrexate or edatrexate; and

(c) enhancing the cytotoxic sensitivity of said neoplastic cells to said methotrexate or edatrexate.

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